This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously presented) A prostaglandin F2 receptor antagonist consisting of an amino acid sequence derived from the second extracellular loop of a prostaglandin F2 receptor, said amino acid sequence comprising one or more sequences selected from the group consisting of ilghrdyk (PCP-8; SEQ ID NO:1); ILGHRDYK (PCP-13; SEQ ID NO:13); ILAHRDYK (PCP-13.7, SEQ ID NO:4); ILGFRDYK (PCP-13.11; SEQ ID NO:5); ILGHKDYK (PCP-13.13; SEQ ID NO:6); ILGHRNYK (PCP-13.14; SEQ ID NO:7); ILGHQDYK (PCP-13.18; SEQ ID NO:8); ILGHRDY-amide (PCP-13.20; SEQ ID NO:9); ILGHRDYK-amide (PCP-13.21; SEQ ID NO:15); ILGWRDYK (PCP-13.22; SEQ ID NO:10); ILaHRDYK (PCP-13.8; SEQ ID NO:14); and ILGXRDYK (PCP-13.24; SEQ ID NO:11), wherein X is cyclohexyl alanine, and wherein small letters indicate L-amino acids and capital letters indicate D-amino acids.

2. (currently amended) A peptide consisting ~~essentially~~ of a variant sequence of ~~any one of~~ SEQ ID NO[[s]]:1 ~~to 11, 13, 14, or 15~~ in which one or [[more]]two amino acid residues are substituted or deleted, [[and]] wherein said variant sequence contains L- and/or D-amino acids and optionally, conversion of a C-terminal CO_2H group to a $CONH_2$ group, and wherein said peptide is a prostaglandin F2 receptor antagonist.

3. (previously presented) A method for decreasing the likelihood of premature delivery of a fetus, which comprises the step of administering to a female in need of such treatment a therapeutically effective amount of the antagonist of claim 1.

4. (previously presented) A method for reducing the occurrence of and/or treating dysmenorrhea comprising the step of administering to a female in need of such treatment a therapeutically effective amount of the antagonist of claim 1.

5. (previously presented) A pharmaceutical composition comprising at least one antagonist of claim 1, and a pharmaceutically acceptable carrier.

6. (withdrawn) A method for determining activity of a compound of claim 1 as a G protein-coupled receptor antagonist capable of binding to the extracellular elements of the said receptor, comprising the steps of:

a) culturing cells which express said receptor or identifying animal tissues *ex vivo* or *in vivo* where physiological consequences are dependent on said receptor;

b) contacting said cells or tissues with said compound at a concentration of 10-10 M to 10-3 M to be tested for antagonist activity at said receptor; and

c) measuring a response to alter the transduction of a signal resulting in physiological consequences selected from the group consisting of increments in cell calcium, phosphoinositide hydrolysis, increased/decreased cellular cyclic adenosine monophosphate, cell growth and/or differentiation, altered gene expression, and smooth muscle contraction or dilation.

7. (withdrawn) A method for determining activity of a compound o f claim 1 as a prostaglandin F2 alpha receptor antagonist capable of binding to the extracellular elements of the said receptor, comprising the steps of:

a) culturing cells which express said receptor or identifying animal tissues *ex vivo* or *in vivo* where physiological consequences are dependent on said receptor;

b) contacting said cells or tissues with said compound at a concentration of 10-10 M to 10-3 M to be tested for antagonist activity at said receptor; and

c) measuring a response to alter the transduction of a signal resulting in physiological consequences selected from the group consisting of increments in cell calcium, phosphoinositide hydrolysis, cell growth and/or differentiation, altered gene expression, and smooth muscle contraction or dilation.

8-9. (cancelled)

10. (previously presented) A method for reducing uterine contraction comprising the step of administering to a female in need of such treatment a therapeutically effective amount of the antagonist of claim 1.